Docket No. J004US

Applicant: S. K. Wong, et al. Application No.: 10/796,463

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#### **REMARKS**

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Claims 1-44 are pending in the application.

#### 1. Specification Informalities and Claim Objections.

The instant amendments to the specification and claims obviate each of the objections raised in the Office Action.

#### 2. Obviousness Rejections.

In the Office Action, claims 1-9, 11-20, 22, 25-33, and 35-44 were rejected under 35 U.S.C. § 103(a) as being obvious over United States Patent Application Document No. 2003/0221261("*Torbet*") in view of United States Patent Application Document No. 2003/0182728 ("*Chapman*").

In the Office Action, claims 10, 21, and 34 were rejected under 35 U.S.C. § 103(a) as being obvious over *Torbet* and *Chapman* in view of United States Patent Application Document No. 2003/0014819 ("*Richardson*").

Claims 23 and 24 have been finally rejected under 35 U.S.C. § 103(a) as being obvious over *Torbet* and *Chapman* in view of United States Patent No. 6,353,950 ("*Bartlett*").

Applicants traverse each of the aforementioned rejections and maintain that, as explained hereinafter, the pending claims as amended herein are patentable over the prior art.

## 1. Claims 1-9, 11-20, 22, 25-33, and 35-44 Are Patentable Over *Torbet* In View of *Chapman*.

#### (a) Torbet's Systems and Methods Are Fundamentally Different.

Torbet's and Chapman's systems differ fundamentally from those of the instant invention and claims 1-9, 11-20, 22, 25-33, and 35-44 are patentable over Torbet and Chapman, whether those references are taken alone or in any combination.

Unlike *Torbet*, the adjustable mattress and pillow systems of the claimed invention comprise both a mattress and pillow which adapt, based on a user's position on the mattress and in response to variation of such position, to an optimum contour for support of the user's body. The electrically conductive sensing mat used in the claimed

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invention receives and processes electrical signals from the mat which vary in relationship to the width of mat area compressed by the user and the pressure exerted on the mat as the position of the user shifts.

The air/fluid compartments of the pillow and mattress used in the instant invention may be inflated or deflated based on a user's presetting control parameters that modulate microprocessor-controlled valves. In the claimed invention, the contours of the pillow and mattress adapt to a preset contour selected by the user as an optimum profile for his or her body and head shape as presented in different sleeping poses.

As conceded by the Examiner, *Torbet* fails to disclose optimization of the contours of a mattress and a pillow relative to the position of the user on the mattress and the pillow and in response to variation of such position. There is also no suggestion in *Torbet* that, under appropriate circumstances, an adjustable pillow's contours could be altered independently of an associated mattress's contours to achieve a preprogrammed optimized sleep configuration for a combined mattress and pillow system. Thus, *Torbet* also lacks any description of regulating a pumping control system and associated valves to maintain a preprogrammed optimized sleep configuration for a combined mattress and pillow system.

Chapman's pressure pad is intended to prevent pressure-associated sores by inflating and deflating rows of cells that support an entire body. Chapman relies on pressure differentials at the head, torso, leg, and heel positions to achieve optimum support. See Chapman, ¶ 36. Chapman does not suggest that his pressure pad could be reconfigured as an adjustable pillow which is integrated with an adjustable mattress to provide a mattress and pillow system of the instant invention.

#### (b) There Was No Legitimate Basis to Combine Torbet and Chapman.

Prior to the effective filing date of claims 1-9, 11-20, 22, 25-33, and 35-44, there was no suggestion or motivation that would have led those of ordinary skill in the art to modify and combine the disclosures of *Torbet* and *Chapman* in the manner advocated by the Examiner, nor was there a reasonable expectation that such modifications and combinations would prove successful. *See Boehringer Ingelheim Vetmedica, Inc. v.* 

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Schering-Plough Corp., 320 F.3d 1339, 65 U.S.P.Q.2d 1961, reh'g en banc denied 2003 U.S. App. LEXIS 11897 (Fed. Cir. May 28, 2003)( a showing of obviousness requires a motivation or suggestion to combine or modify prior art references, coupled with a reasonable expectation of success).

As explained herein, the only way *Torbet's* and *Chapman's* mattress system could have been modified and combined as suggested by the Examiner was to have used the invention of Applicants' claims as a template. In other words, the Examiner resorted to impermissible hindsight in evaluating the obviousness of the claims at issue.

In re Kotzab, 217 F.3d 1365, 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000). Neither *Torbet* nor *Chapman*, when taken individually or together, suggest that *Chapman's* pillow could be combined with *Torbet's* mattress and configured - using a modified version of *Chapman's* sensing mat - to ensure that the sensor mat is in direct contact with a user, generates electrical signals which vary in relationship to the width of compressed area and the pressure exerted on the mat as the position of the user shifts, and adjusts a supporting pillow and mattress in accordance with preprogrammed settings to optimize mattress and pillow contour to ensure a comfortable sleeping position.

The Examiner, in assessing the obviousness of the dependent claims, has ignored the limitations of independent claims 1, 12, 27, and 38. Those limitations are included in the claims which depend, directly or indirectly, from claims 1, 12, 27, and 38 and provide bases to distinguish the dependent claims over *Torbet* and *Chapman* for the reasons provided above. *See Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 U.S.P.Q. 81 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947 (1987)(obviousness must be assessed by analyzing the claimed invention when taken as a whole, rather than by focusing on the obviousness of particular substitutions and differences; claim limitations cannot be ignored in assessing obviousness).

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# 2. Claims 10, 21, and 34 Are Patentable Over *Torbet* and *Chapman* in View of *Richardson*.

There is no reasonable basis to maintain that *Richardson's* hand-pumped adjustable pillow could be applied with the combined *Torbet* and *Chapman* mattress system relied on by the Examiner to arrive at the invention claimed in claims 10, 21, and 24. *Richardson* does not disclose or suggest that his hand-inflated pillow could somehow be modified and combined with *Torbet* and *Chapman* to arrive at a system in which mattress contour and pillow contour is adjusted to fit a variety of body shapes as presented in different sleeping poses, as accomplished by the invention of the claims at issue.

Even if skilled artisans were motivated to combine *Torbet*, *Chapman*, and *Richardson*, such a combination would not yield the invention claimed in claims 10, 21, and 24. *Richardson* does not provide the features of the claimed invention which are missing from *Torbet* and *Chapman*, and modifying *Torbet*, *Chapman*, and *Richardson* to arrive at the claimed invention necessarily requires the exercise of impermissible hindsight.

### 3. Claims 23 and 24 are Patentable Over Torbet and Chapman in View of Bartlett.

Bartlett detects changes in a mattress angle and varies mattress pressure in response to the angular changes. Bartlett does not monitor the effect of changes in sleeping position relative to an optimum mattress and pillow contour.

Short of impermissible hindsight based on the invention of claims 23 and 24, there is no basis to suppose that skilled artisans would have taken *Bartlett's* disclosure of mattress angle-based mattress pressure adjustments and combined and modified such a feature with *Torbet* and *Chapman* as suggested by the Examiner and as discussed above.

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#### 4. Conclusion.

As set forth above, *Torbet's* and *Chapman's* systems and methods differ fundamentally from those of the instant invention. The permutations and modifications of *Torbet, Chapman, Richardson*, and *Bartlett* which provide the bases of the Examiner's obviousness rejections are grounded on impermissible hindsight.

Each of the pending claims are patenatble over *Torbet, Chapman, Richardson*, and *Bartlett*, whether those references are taken alone or in any combinations.

Accordingly, Applicants respectfully request that the rejections of claims 1-44 be withdrawn and that all of those claims be passed to issue.

Respectfully submitted

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